

### **Remarks**

Entry of the amendments, reconsideration of the application, as amended, and allowance of all pending claims are respectfully requested. Upon entry of the amendments, claims 1-15 and 31-35 are pending.

Support for the amendments may be found throughout applicants' specification. For instance, support for the amendment to independent claim 1 may be found in, for instance, paragraph 21 and FIG. 1 of applicants' specification. Further, support for the new system claims may be found in the case as originally filed, as well as throughout applicants' specification, including, for instance, paragraphs 21 and 73 and FIG. 1. Therefore, no new matter has been added.

In the Office Action, dated April 9, 2009, claims 1-15 and 31-33 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of the invention. In particular, claim 1 is rejected as not being tied to a particular machine or transforming the underlying subject matter. Without acquiescing to this rejection, applicants have amended independent claim 1 to tie the automatically mapping to a particular machine. In particular, independent claim 1 has been amended to recite that the automatically mapping is performed by a configuration unit. Thus, applicants respectfully request withdrawal of the §101 rejection.

Additionally, claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. In particular, it is stated that the specification fails to disclose mapping being performed prior to installation. While applicants strenuously disagree with this rejection, applicants have amended claim 1 to remove that wording. Further, applicants have amended claim 31 to specifically recite that the machine being configured is a new machine being built. Support for dependent claim 31 may be found throughout applicants' specification, including, for instance, paragraphs 27, 30, 35 and 50, and therefore, no new matter is added. Based on the foregoing, applicants respectfully request withdrawal of the §112, first paragraph, rejection.

Additionally, claims 1-6, 8-15 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siamak et al. (EP 0969,371) in view of Varaiya (U.S. Patent No. 4,754,397); and claims 7 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siamak in view of Varaiya and further in view of Wilson (U.S. Patent No. 6,763,454). Applicants respectfully, but most strenuously, traverse these rejections for the reasons herein.

In accordance with an aspect of the present invention, a capability is provided for facilitating the configuring of communications environments. In one example, automatic mapping is used to configure an I/O configuration. For instance, it is used to map physical identifiers of I/O resources to logical identifiers of those resources. The mapping is based on the physical structure of the machine, as well as avoiding single points of failure or single points of repair.

In one particular example, applicants claim a method of facilitating configuring of resources of a communications environment (e.g., independent claim 1). The method includes, for instance, automatically mapping, by a configuration unit, a first identifier of a resource of a machine being configured to a second identifier of the resource to assign a physical path of the resource to a logical path of the resource, wherein the first identifier is usable by hardware to identify the resource and the second identifier is usable by a program of the machine to identify the resource, and wherein the mapping is based on the physical structure of the machine being configured and on avoiding single points of failure or single points of repair.

Thus, in this aspect of applicants' claimed invention, a first identifier of a resource of a machine being configured is mapped to a second identifier of the resource to assign a physical path of the resource to a logical path of that resource. This mapping is based on the physical structure of the machine being configured and on avoiding single points of failure or single points of repair. This is not described, taught or suggested in Siamak or Varaiya, either alone or in combination.

Siamak reads device identifiers from storage devices in a computer system and uses the device identifiers to create a mapping associating the device identifiers with corresponding physical paths to the storage devices. Upon reconfiguration of the storage

devices, the computer system again reads device identifiers from storage devices in order to verify that the system was reconfigured correctly. So, in Siamak, when there is a reconfiguration, the system uses a mapping file to determine if there was a mistake made during the reconfiguration. There is, however, no description, teaching or suggestion in Siamak of mapping physical identifiers to logical identifiers, wherein the mapping is based on avoiding single points of failure or single points of repair, as claimed by applicants. Siamak makes no reference to single points of failure or single points of repair in describing or creating its mapping table (see, e.g., paragraphs 19-24 of Siamak).

Since Siamak fails to disclose at least applicants' claimed element of automatically mapping a first identifier to a second identifier based on the physical structure of a machine being configured and on avoiding single points of failure or single points of repair, as explicitly admitted in the Office Action, Varaiya is relied upon. However, Varaiya does not overcome the deficiencies of Siamak.

Varaiya also fails to describe, teach or suggest at least applicants' claimed element of automatically mapping a first identifier of a resource to a second identifier of the resource to assign a physical path of the resource to a logical path of the resource, wherein the mapping is based on a physical structure of the machine being configured and on avoiding single points of failure or single points of repair. While Varaiya describes using redundancy to avoid a single point of failure for an entire computing facility (e.g., col. 8, lines 19-20), Varaiya fails to describe, teach or suggest mapping identifiers such that the mapping avoids single points of failure or single points of repair.

Applicants respectfully submit that the mere mention of avoiding single points of failure is not a description, teaching or suggestion of applicants' claimed automatically mapping element. Even though Varaiya mentions the avoidance of single points of failure, there is no correlation between that and mapping an identifier in order to avoid single points of failure. Varaiya, like Siamak, fails to describe, teach or suggest a technique for automatically mapping identifiers that avoid single points of failure, as claimed by applicants.

The combination of Siamak and Varaiya, *assuming arguendo* the combination is proper, merely describes that an identifier may be mapped, and that resources may be configured to perform redundancy. However, there is no correlation between the two in the combination. The combination does not suggest that the mapping of an identifier is based on a physical structure in the machine being configured and on avoiding single points of failure or single points of repair. The combination simply indicates that identifiers may be mapped in some fashion, and that resources can be configured to provide redundancy. To indicate that the combined teachings describe what is claimed by applicants is hindsight reconstruction of applicants' invention.

Since the combination of Siamak and Varaiya fails to describe, teach or suggest at least applicants' claimed element of automatically mapping a first identifier of a resource to a second identifier of the resource based on the physical structure of the machine being configured and on avoiding single points of failure or single points of repair, applicants respectfully request an indication of allowability for independent claim 1.

Further, independent claim 34 is patentable over the combination of Siamak and Varaiya for at least the reasons provided above. For instance, applicants respectfully submit that the combination of Siamak and Varaiya fail to describe, teach or suggest at least applicants' claimed element of automatically mapping a first identifier of a resource of a machine being configured to a second identifier of the resource to assign a physical path of the resource to a logical path of the resource, wherein the mapping is based on the physical structure of the machine being configured and on avoiding single points of failure or single points of repair. Thus, applicants respectfully request an indication of allowability for independent claim 34.

The dependent claims are patentable for the same reasons as the independent claims, as well as for their own additional features. For example, dependent claim 31 specifically recites wherein the machine being configured is a new machine being built. This is not described, taught or suggested in the combination of Siamak and Varaiya. In contrast to applicants' claimed invention, Siamak performs tasks for machines already installed. Again, there is no description, teaching or suggestion in either of the references, alone or in

combination, of automatically mapping a first identifier of a resource to a second identifier of the resource based on the physical structure of the machine being configured and on avoiding single points of failure or single points of repair, wherein the machine being configured is a new machine being built, as claimed by applicants. Thus, applicants respectfully request an indication of allowability for dependent claim 31.

Further, the other cited references, including Wilson, do not overcome the deficiencies of Siamak and Varaiya.

As one particular example, applicants respectfully submit that dependent claim 32 is patentable over the combination of Siamak, Varaiya and Wilson. Dependent claim 32 recites that the another resource is a control unit, the resource is a channel, the first identifier is a physical channel identifier (PCHID) and the second identifier is a logical channel identifier (CHPID), and wherein the priority is assigned to the control unit by a user, and wherein the automatically mapping comprises first selecting the control unit with the highest priority, and for that control unit, mapping a PCHID to a CHPID of a channel associated with the control unit. This is not described, taught or suggested in Siamak, Varaiya or Wilson, either alone or in combination.

It is explicitly admitted in the Office Action that Siamak and Varaiya fail to disclose priority, and therefore, Wilson is relied upon. Wilson describes a reserved resource list that is used to prioritize the allocation of resource elements, and that the elements on the reserved resource list are not used until the other non-reserved resource elements are used. This is very different from applicants' claimed invention in which the automatically mapping includes first selecting the control unit with the highest priority, and for that control unit, mapping a PCHID to a CHPID of the channel associated with that control unit. Such a mapping based on priority is not described, taught or suggested in Wilson. Since Siamak, Varaiya and Wilson fail to describe, teach or suggest this aspect of applicants' claimed invention, applicants respectfully request an indication of allowability for dependent claim 32.

As a further example, dependent claim 33 specifically recites that the resource is a channel and the mapping is further based on the type of channel. Applicants respectfully

submit that this is not described, taught or suggested in any of the cited references, either alone or in combination. Therefore, applicants respectfully request an indication of allowability for dependent claim 33.

**Applicants respectfully request a telephonic interview with the Examiner at the time the Examiner considers this Response, if the Examiner continues to have concerns over the claimed invention. An Applicant Initiated Interview Request Form is included herewith.**

Respectfully submitted,

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